

REMARKS

I. STATUS OF THE CLAIMS

Claims 1-69 were previously pending in this application, with Claims 1, 20 and 41 being written in independent form. Claim 56 is canceled without prejudice or disclaimer. Claims 41-45, 47, 53-55 and 57-62 have been amended herein. New claim 70 is added herein. Applicants submit that no new matter has been added by way of this amendment.

Claims 1-17, 20-27, 39-54, 59-61, 63-69 stand rejected under 35 U.S.C. §103 as being unpatentable over U.S. Patent No. 6,175,822 to Jones ("Jones '822 patent"), in view of U.S. Patent No. 6,292,834 to Ravi ("Ravi '834 patent"). In addition, dependent Claims 18-19, 38, 55-58 and 62 stand rejected under 35 U.S.C. §103 as being obvious over the Jones '822 patent, the Ravi '834 patent and in further view of U.S. Patent No. 6,460,076 to Srinivasan ("Srinivasan '076 patent"). Reconsideration and withdrawal of the rejections, and allowance of the claims are respectfully requested.

II. THE PENDING CLAIMS ARE PATENTABLE

As discussed below, Applicants respectfully submit that the claims, as pending, are patentable over the prior art of record. Reconsideration and withdrawal of the rejections are respectfully requested.

A. There Is No Motivation To Combine The Cited References

Applicants respectfully submit there is no motivation to combine these references to address the problem recognized by the claimed invention. As is well established, when it is necessary to select elements of various teachings as the Examiner has done to form the claimed invention, it must be ascertained whether there is any suggestion or motivation in the prior art to make such selection as made by the Applicant. It is improper to use hindsight (i.e., the patent

claim as an instruction book) to combine or reconstruct the prior art to arrive at the present invention.

The Examiner states that it would have been obvious to modify Jones with the teachings of Ravi and also in view of Srinivasan. However, one looking to Jones would be seeking a method of recording a speech signal and transmitting it over a data network to a client. One would turn to the Ravi reference to avoid buffer overrun or prevent data loss as alleged by the Examiner. Also, the Examiner's reliance on the Srinivasan '076 patent (directed to a "Pay Per Record System and Method") further evidences the use of impermissible hindsight to construct a rejection based on the pending claims. Applicants respectfully submit there is no motivation to combine the Jones '822 patent and the Ravi '834 patent or Srinivasan '076 patent to attempt to obtain the claimed invention and that the asserted combination has been constructed using impermissible hindsight.

B. None Of The Cited References Teach Or Suggest Reducing An Initial Transmission Rate After Receipt Of A Predetermined Amount Of Data

Even assuming *arguendo* that the combination of Jones and Ravi were proper, they do not teach or suggest Applicants' claimed invention. All of the pending claims recite (either directly or indirectly) that blocks of data are received at an initial data transfer rate which is reduced upon receipt of a predetermined amount of data. Applicants respectfully submit that none of the cited references teach or suggest this claim limitation.

The Examiner acknowledges that Jones does not teach receiving blocks of data at an initial data transfer rate that is reduced upon receipt of a predetermined amount of data. (See, Office Action, page 3, ¶ 2). Instead, relying on Ravi, the Examiner suggests that, "Ravi shows in

Figs. 2 & 4 a system in which the transmission rate is dynamically adjusted based upon the number of data currently in the playout buffer.” (See, Office Action, page 3, ¶ 2). Applicants respectfully disagree and believe that this statement is an overgeneralization of the system taught by Ravi.

Adjustment in Ravi’s system is based on a broad set of dynamic performance variables or factors that are used to adjust the bandwidth throughout operation (as described below). In direct contrast, the present invention is directed to reducing the initial bandwidth based solely on receipt of a predetermined amount of data.

In asserting that Ravi discloses the limitation of reducing the initial bandwidth based solely on receipt of a predetermined amount of data, the Examiner relies on Figs. 2 and 4. However, Fig. 2 is simply a “block diagram showing an exemplary hardware environment for practicing...the present invention,” and “Fig. 4 is a flowchart...which illustrate[s] the Adjust_Bandwidth procedure....” (See, Col. 3, lines 48-50 and 55-59). As shown in Fig. 4, Ravi’s Adjust_Bandwidth procedure is executed to calculate a set of performance variables for the analysis. Part of the procedure involves defining a variable operating threshold based on the dynamic performance variables. If the amount of data in the playback buffer falls outside the variable operating threshold, additional analysis is conducted to determine whether to adjust the transmission rate to stay within the variable thresholds (See, Figs. 5B-5E and the corresponding disclosure in the Ravi ‘834 patent).

The first step in Ravi’s Adjust_Bandwidth procedure is “Compute Performance Variables,” shown as 410 in Fig. 4 (and in greater detail in Fig. 5A). Step 410, “Computing the Performance Variables,” involves the calculation of the following variables to determine whether a transmission rate adjustment is necessary:

Step 512 UPPER INC_BW_THRESHOLD (“INC_BW”) (calculated as shown in Fig. 6A);

DEC_BW_THRESHOLD (“DEC_BW”) (calculated as shown in Fig. 6B)

Step 513 PLAYTIME (calculated as shown in Fig. 7A)

DELTA_PLAYTIME (calculated as shown in Fig. 7A)

Step 514 ROUND_TRIP_TIME_BIT_IS_HIGH (calculated as shown in Fig. 8)

Step 516 LOSSRATE_BIT_IS_HIGH (calculated as shown in Fig. 9)

The variable parameters calculated in step 410 are the input parameters for a two-part transmission rate adjustment analysis (steps 420-450 in Fig. 4 and corresponding Figs. 5B-5E).

The two-part analysis shown in Fig. 4, steps 420 and 430, relates to decreasing the transmission rate. The process of each step (420 and 430) is shown in greater detail in Figs 5B and 5C, respectively. Specifically, the Ravi ‘834 patent discloses, “in step 420, the computed performance variables are used to determine if it is desirable to decrease the bandwidth, and if so, then in step 430 the bandwidth is decreased.” (See, Col. 7, lines 26-34). In this process, the system determines the dynamically variable operating threshold based on the performance variables (INC_BW, DEC_BW, PLAYBACK and DELTA_PLAYBACK) and determines whether it is necessary to increase or decrease the transmission rate based on whether the amount of data in the playout buffer falls within the variable operating threshold (A similar two-part analysis is conducted for increasing the transmission rate in steps 440 and 450 in Fig. 4 and corresponding Figs. 5C and 5D).

Applicants respectfully submit that the Ravi ‘834 patent teaches adjusting the transmission rate during operation only after calculating and analyzing the dynamically calculated variable operating thresholds. Therefore, Ravi teaches that it is possible to actually

increase the transmission rate by way of the above-described analysis. In direct contrast, the pending claims recite, *inter alia*, that blocks of data are received at an initial data transfer rate which is reduced upon receipt of a predetermined amount of data. Adjusting transmission rates dynamically to stay within a variable operating window as disclosed in the Ravi '834 patent, is entirely different from reducing the initial transfer rate upon receipt of a predetermined amount of data.

As discussed in the Specification of the instant application, the claimed invention achieves increased performance by transferring initial blocks of data at a relatively high initial transmission rate, and then reduces the transmission rate once a predetermined amount of data is transferred. The transmission rate can be reduced after the streaming data file has been established and needs only to be supported. The claimed method for achieving the advantage associated with data transmission is not taught or suggested by Ravi's variable operating thresholds.

Accordingly, for at least these reasons, Applicants respectfully submit that all of the pending claims are patentably distinct from the cited references, taken either alone or in combination. Therefore, Applicants respectfully request withdrawal of this ground of rejections.

Should the Examiner maintain this rejection, Applicants respectfully request that the Examiner specify precisely where the Ravi '834 patent teaches or suggests reducing an initial data transfer rate upon transfer of a predetermined amount of data, as recited in the pending claims.

CONCLUSION

For the reasons discussed above, Applicants respectfully submit that all of the pending claims are patentable and in condition for allowance, which is respectfully requested.

In the event that a telephone conference would facilitate examination of this application in any way, the Examiner is invited to contact the undersigned at the telephone number provided below.


Favorable consideration is respectfully requested.

The Commissioner is hereby authorized to charge any additional fees that may be required for the timely consideration of this response under 37 C.F.R. §§ 1.16 and 1.17, or credit any overpayment, to Deposit Account No. 13-4500, Order No. 3037-4178.

Respectfully submitted,

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